



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,882	07/18/2003	Evan E. Koslow	KT-P-025US	2756
7590	10/13/2005		EXAMINER	
Shirley S. Ma KX INDUSTRIES, L.P. 269 S. Lambert Road Orange, CT 06477			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/622,882	KOSLOW, EVAN E.
	Examiner Krishnan S. Menon	Art Unit 1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 September 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) See office action is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 8,9,13,16,20,21,25 and 30 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

### **DETAILED ACTION**

Claims 1-74 are pending of which 1-7,10-12,14,15,17-19,22-24,26-29 and 31-74 are withdrawn from consideration as belonging to the non-elected invention.

#### ***Election/Restrictions***

Applicant's election without traverse of claims 8,9,13,16,20,21,25,30,38 and 43 in the reply filed on 9/6/05 is acknowledged. However, since claims 38 and 43, which recites the elected species 'microbiological interception enhancing agents', depend from claims 32 and 40 respectively, and claims 32 and 40 are directed to a non-elected species (another unrelated active ingredient at >10% by weight), claims 38 and 43 are also withdrawn from consideration. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Claims 8,9,13,16,20,21,25 and 30 will be examined.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative under 35 USC 103(a) as being obvious over, Blomgren et al (US 5,246,794).

Blomgren teaches a sheet comprising carbonized carbon fibrils of 2-200 nm diameter (column 3 lines 52-53, abstract, column 2 lines 9-40. "Carbonized at temperature less than about 600 C" is a process limitation in a product claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

2. Claim 8,9,13,20,21 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative under 35 USC 103(a) as being obvious over, Wilson et al (US 6,321,915).

Claim 8: Wilson teaches a sheet (paper, filter paper – see column 12 lines 29-37; felt – column 14 lines 56-65) comprising carbon fibrils (whiskers – column 7 lines 4-24) of diameter 50-200 nm (column 6 lines 35-40). "Fibrillated" and 'carbonized at less than

600 C' are process limitations in a product claim, which are not patentable – In re Thorpe.

Claim 9: BET surface area of 1000-1500 m<sup>2</sup>/g – column 10 lines 25-30

Claim 21: Wilson teaches a sheet of carbon fibrils with diameter 50-200 nm, surface area 1000-1500 m<sup>2</sup>/g, as described under the rejection of claims 8 and 9 above. The recitation of fiber diameter prior to carbonization and the process conditions for carbonization are part of the process not reflected structurally in the product, and therefore, not patentable – In re Thorpe.

Claims 13, 25: the sheet comprises fibrillated lyocell – see Rayon based carbon fibers in column 10 lines 25-30; carbon fibers from PAN, pitch or rayon is well known – column 6 lines 44-47. (Lyocell is a rayon)

Claim 20 – filter medium containing the sheet – see abstract.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 16 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson'915 as applied to claim 8 or 21 above, and further in view of Patrick et al (US 5,762,797).

Claims 16 and 30 differ from the teaching of Wilson in the recitation of a microbiological interception enhancing agent, which the Wilson reference does not teach. Patrick teaches using antimicrobial agent treatment to prevent filters/filter surfaces from harboring bacteria, and also for treating water filtered (column 4 lines 30-59). It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Patrick in the teaching of Wilson, because, even though Wilson's filter media may be capable of filtering bacteria or other microbes, Patrick teaches the need for preventing bacterial growth on the filter media (column 1 lines 3-13 and 60-63).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1723

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Krishnan S. Menon

Patent Examiner

10/8/05